

NEW DESCRIPTIONS

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A NEW GENUS OF ECTRICHODIINAE FROM SOUTHERN INDIA (INSECTA-HETEROPTERA-REDUVIIDAE)¹

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(With four text-figures)

A new genus of Ectrichodiinae viz., *Noehaematorrhophus* Gen. nov. is described and illustrated. A key for the identification of Indian Ectrichodiinae genera is formulated. The new genus is differentiated from the closely allied genus *Haematorrhophus* Stal. The holotype (Female) collected from Malumichampatti, a semiarid zone in Coimbatore district, Tamil Nadu, India is deposited in the Insect collection, Division of Entomology, Bharathiyar University, Coimbatore, India.

INTRODUCTION

In her key to the genera of Asian Ectrichodiinae, Cook (1977) has mentioned that

the subfamily Ectrichodiinae is readily recognised by its characteristic two pronged scutellum and on the basis of scutellum, nature of

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rostral segments, architecture of pronotum and the extent of anteocular and postocular areas she has enumerated the key for forty one genera. Distant (1904) considered the number of antennal joints as the primary character in enumerating the keys for his eleven genera of Echtrichodinae. In the present investigation the antennae are also taken into consideration.

Members of the subfamily Echtrichodiinae alone have been described by Distant (1904) as having more than four antennomeres. On the basis, the new genus *Neohaematorrhophus* is included under the subfamily Echtrichodiinae. It has five segmented antennae with two intercalary segments in between third and fourth and fifth segments where as *Haematorrhophus* Stal (*Physorhychus* Amy. & Serv.) has been described by Distant as having six jointed antennae. Out of the twenty four species recorded in India the genus *Haematorrhophus* Stal has the maximum number (10) of species represented.

Neohaematorrhophus Gen. nov.

Body oblong, head elongate, anteocular area $1\frac{1}{4}$ longer than postocular area, antennae five segmented, rostrum less crescentic, the first joint not extending beyond the eyes, transverse furrow dividing the prothorax into almost equal halves, anterior lobe bulbous, bearing a median prominent foveation not extending beyond the pronotal transverse furrow, very narrow collar bearing minute lateral tubercle, the posterior lobe more rectangular, smooth, porterolaterally faintly deflected, scutellum very minute bearing a median and lateral angulations; median angulations more prominent, anterior femora somewhat strongly in-crassated bearing two prominent ventral tubercles subapically and a few very minute ones along the length; fossula spongiosa not pro-

minent, median abdominal scent gland orifice found on the fourth segment more prominent than those on the third and fifth segments. The males alate and females micropterous.

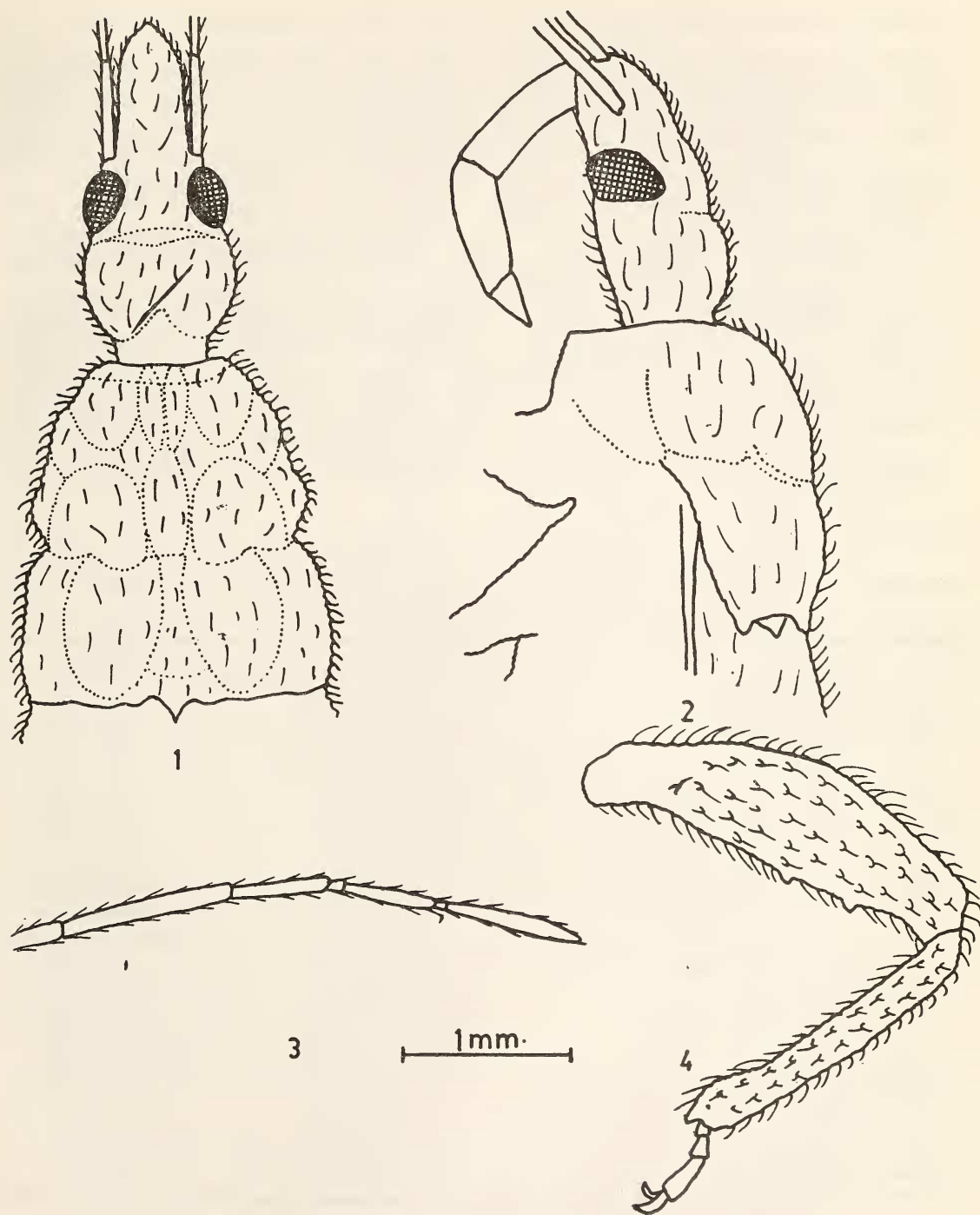
The foregoing description on the genus clearly differentiate it from *Haematorrhophus* and therefore the erection of new genus *Neohaematorrhophus* is appropriate, though it has close affinity to the former.

KEY FOR THE IDENTIFICATION OF GENERA OF ECHTRICHODIINAE

Distant (1904) considers the number of antennal joints as the primary character in formulating the synopsis for the eleven genera of the family Echtrichodiinae. But, he fails to include two genera *Antipula* Stal and *Quercetanus* Distant since the two genera are only represented by specimens in which the antennae are imperfect. But he lists a number of characters by which both genera are easily recognized from the other eleven genera as well as from the newly described genus. The number of antennal segments is taken as the primary character in preparing this synopsis.

1. Antennae with eight joints, 2
Antennae with less than eight joints 5
2. Scutellum with two apical spinous angulations 3
Scutellum with three apical spinous angulations, the middle one minute *Ectrychotes* Burm.
3. Rostrum with first joint longer than remaining joints together 4
Rostrum with first joint about as long as remaining joints together *Scadra* Stal.
4. Head long, about as long as anterior femora connexivum with its margin even, not spined *Audernacus* Distant
Head not prominently elongated, connexivum with basal segment spinously produced *Bayerus* Distant
5. Antennae with seven joints 6
Antennae with less than seven joints 8
6. Anterior femora unarmed 7

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Figs. 1-4. *Haematorrhophus thersatii* sp. nov.

1. Head, pronotum and scutellum dorsal view; 2. Head, pronotum and scutellum lateral view; 3. Antenna; 4. Foreleg.

- Anterior femora strongly spined near apex.....
 *Labidocoris* Mayr.
 7. Antennae with first joint about as long as head;
 eyes not unusually prominent *Mendis* Stal.
 Antennae with first joint much longer than
 head; eyes exceedingly prominent
 *Libavius* Distant
 8. Antennae with six joints 9
 Antennae with less than six joints 11
 9. Abdomen rugose; not globose 10
 Abdomen globose, above levigate not rugose...
 *Eriximachus* Distant
 10. Abdomen beneath not longitudinally impressed,
 or with the first four segments linearly medially
 impressed *Haematorrhophus* Stal.
 Abdomen beneath with the first four segments
 distinctly centrally divided *Stegius* Distant
 11. Antennae with five segments.....
 *Neohaematorrhophus* Gen. nov.
 Antennae with four segments *Vilius* Stal.

AFFINITIES

The new genus *Neohaematorrhophus* has close affinity to *Haematorrhophus* in having the following characters: Body oblong, first and second rostral segments subequal in length and transversely constricted pronotum.

However the new genus can be very easily differentiated from the genus *Haematorrhophus* by the longer anteocular area, five segmented antennae, very narrow collar bearing minute lateral tubercle, anterior bulbous pronotal lobe with a median foveation not extending beyond the pronotal transverse furrow, more rectangular smooth posterior lobe with postero lateral faint deflection, very minute scutellum with a more prominent median and less prominent

TABLE 1

MEAN VALUES OF ($\bar{x} \pm SE$) MALE AND FEMALE MORPHOMETRIC ANALYSES OF *Neohaematorrhophus thersii* IN MM (N=6)

No.	Characters	Male	Female
1.	Length of anteocular area	1.12 $\pm$ 0.09	1.09 $\pm$ 0.09
2.	Length of postocular area	0.72 $\pm$ 0.04	0.61 $\pm$ 0.04
3.	Width between eyes	0.54 $\pm$ 0.01	0.57 $\pm$ 0.02
4.	Diameter of eyes	0.38 $\pm$ 0.03	0.42 $\pm$ 0.02
5.	Length of first antennal segment	0.25 $\pm$ 0	0.25 $\pm$ 0.02
6.	Length of second antennal segment	0.85 $\pm$ 0.07	0.95 $\pm$ 0.06
7.	Length of third antennal segment	0.46 $\pm$ 0	0.59 $\pm$ 0.02
8.	Length of fourth antennal segment	1 $\pm$ 0	1.02 $\pm$ 0.01
9.	Length of fifth antennal segment	1.14 $\pm$ 0.01	1.02 $\pm$ 0.01
10.	Length of first rostral segment	0.83 $\pm$ 0	0.87 $\pm$ 0.03
11.	Length of second rostral segment	0.86 $\pm$ 0.05	0.83 $\pm$ 0.02
12.	Length of third rostral segment	0.32 $\pm$ 0.03	0.34 $\pm$ 0.02
13.	Length of prothorax	1.03 $\pm$ 0.1	1.24 $\pm$ 0.12
14.	Width of prothorax	1.67 $\pm$ 0.11	1.77 $\pm$ 0.18
15.	Length of fore tibia	1.77 $\pm$ 0.04	1.85 $\pm$ 0.07
16.	Length of mid tibia	1.58 $\pm$ 0.03	1.56 $\pm$ 0.02
17.	Length of hind tibia	2.58 $\pm$ 0.28	2.21 $\pm$ 0.04
18.	Length of wing	4.99 $\pm$ 0.32	1.12 $\pm$ 0.11
19.	Width of wing	2.4 $\pm$ 0.3	0.53 $\pm$ 0.05
20.	Length of abdomen	3.71 $\pm$ 0.51	3.69 $\pm$ 0.13
21.	Width of abdomen	2.65 $\pm$ 0.16	3.16 $\pm$ 0.17

lateral angulations, strongly incrassated anterior femora with two prominent ventral, subapical tubercles and a very few minute ones along the length, spongy furrow not prominent, median abdominal scent gland orifice in the fourth segment more prominent than those on third and fourth segments.

***Neohamatorrhophus therasii* sp. nov.**

Holotype Female, Reg. No. 7, Insect collection, Division of Entomology, Bharathiyar University, Coimbatore, India.

Paratypes were collected (11.6.1978) from Malumichampatti semiarid zone in Coimbatore district and Maruthvazhmalai scrub jungle in Kanyakumari District by Dunston P. Ambrose (Ambrose 1980).

Length 7 mm, width across pterothorax 4 mm. Violaceous black except the dark maroon colour of the terminal two flagellar segments.

Head richly pilose, moderately large, a median transverse impression just behind the eyes delimiting a much longer acutely pointing anteocular area from a shorter globous postocular area that posteriorly narrowing into the neck; Ocelli maroon coloured just behind the transverse impression and the inner margin of eyes; filamentous antennae five segmented, scape short not extending beyond the clypeal limit, pedicel long and terminal flagellar segment longer than first and second flagellar segment individually which measure in equal length; slender three segmented almost straight (semi crescentic) rostrum reaching the prosternal stridulatory furrow while at rest, first two segments subequal, the first joint not extending beyond eyes, the third segment very short.

Prothorax richly pilose, marginally with pale fine hairs, each originating from marginally serrated angulations, transverse impression delimiting an anterior and posterior

pronotal lobes which subequal in length, the anterior lobe more bulbous, smooth with a median longitudinal moderately shallow foveation not extending beyond its posterior limit and very indistinct lateral longitudinal elevations not reaching the ends anteriorly, delimiting a very narrow collar having very small nodule like lateral tubercle; posterior pronotal lobe less bulbous but rectangular, smooth, posterolateral angles slightly deflected in the form of flange; scutellum very tiny, not spinous but broadly angular, median angulation more prominent; legs relatively shorter, midleg the shortest and hind leg the longest, tibial spongy furrow less prominent, serrated and richly pilose, anterior femora strongly armed ventrally with two prominent tubercles and a few minute tubercles along the longitudinal ridge; micropterous, wing rudiments not reaching abdomen (males alate). (Figs. 1-4).

Abdomen richly pilose, but margins not serrated, a large maroon spot marking the second abdominal scent gland orifice at the dorsum of fourth abdominal segment, prominent orifice of the scent glands of the lateral margins of first abdominal segment slit like, abdomen slightly longer than broad.

Sexual dimorphism is well pronounced. Longer and broader prothorax, longer forelegs, shorter hind legs, micropterous condition of wings and broader abdomen are the diagnostic features of females. Morphometric analyses of both sexes are given in Table 1.

The species is named after Mother Theresa.

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A NEW SPECIES OF *LACTUCA* (ASTERACEAE) FROM KASHMIR, INDIA¹

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(With four text-figures)

Lactuca kashmiriana sp. nov., a new species allied to *L. decipiens* Clarke is described.

During the course of a revision of the subtribe *Lactuceae* in India, we examined some specimens which showed affinities to *Lactuca decipiens* Clarke in general habit of plant but on critical examination of specimens both at BSD and DD, proved that the specimens were of a new species, which is described here.

***Lactuca kashmiriana* sp. nov.**

L. decipienti Clarke affinis, sed differt bracteis involucribus exterioribus perbrevioribus, bracteis involucribus interioribus ad centrum fuscatis cum marginibus hyalinis; acheniis gradatim angustatis ad rostrum longum cum costis regularibus manifestis in dorso lateribus.

Herba perennis. Caulis ca 60-80 cm altus, erectus, glaber, sursum paniculatim ramosus. Folia ca 4.5 × 3.5 cm., numerosa e basi ad medium caulis, cum foliis minoribus ad axillas foliorum latiorum, folia inferiora et suprame-diana cum petiolis longis alatisque, membrana-

cea, cordata vel deltoidea, varie dentata, sagittata vel auriculata, supra acute serrata, ovata vel hastata. Inflorescentia paniculatim ramosa. Capitula ca 13-14 x 1-2.5 mm in ramis terminalibus, cernuis, angustis, cylindricis, 2-3 floris, pedunculus parvus, gracilis, glaber, nutans, flosculus ligulatus, ligula purpurea vel azurea. Bractee involucriales exteriores ca 1-1.5 x 0.5-1 mm, ovatae, bractee involucriales interiores 5, aequales, ca 13-14 x 2-2.5 mm, lineari-lanceolati, perangustati, glabri vel setosi, cum centro fuscato, marginibus hyalinis, quam bracteis exterioribus perlongiores. Achenia ca 6-6.5 mm longa, oblanceolata, gradatim angustata ad rostrum longum; costae regulares, manifesti, cum costa mediana conspicua in uno latere, 11-12 costata in altero latere, angustata ad uterque extremitates quam centro, glabra, pallide luteo brunnea. Pappus ca 4-5 mm, pallide albida.

Holotypus lectus: INDIA: Kashmir: Degwan B. M. Wadhwa 67012A et positus in CAL.

***Lactuca kashmiriana* sp. nov.**

Allied to *Lactuca decipiens* Clarke, but

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